

Department of Energy

Western Area Power Administration P.O. Box 281213 Lakewood, CO 80228-8213

May 12, 2023

Dear Colleagues:

Western Area Power Administration (WAPA) maintains a proven record of delivering reliable, cost-based hydropower to customers by monitoring available hydropower resources and transmission system capacity during normal and emergency operations. The purpose of this letter is to provide you, our customers, with the necessary information about what to expect from WAPA, so you can incorporate it into your own preparations and responsiveness.

When heat waves, cold fronts, or other extreme weather occurs, WAPA determines its ability to respond to customers and neighboring systems. WAPA uses operational reports, vegetation inspection reports, transmission system health indexes, outage schedules, fire hazard data, and weather and drought forecasts to anticipate how adverse weather conditions may constrain generation and transmission infrastructure. Extreme weather events can lead to insufficient electricity supplies and emergency situations within Balancing Authorities (BA) and markets across the Western Interconnection.

Our proactive measures prepare us for daily peak energy use and Energy Emergency Alerts (EEAs). As emergency situations arise, WAPA follows its emergency criteria procedures. WAPA BAs and sub-BAs evaluate excess capacity or energy to determine how to alleviate emergencies for neighboring utilities in the interest of overall grid reliability.

Here is a summary of strategies and tactics WAPA has, as we prepare for summer 2023:

Marketing Resource Availability

WAPA hydropower depends on available water resources at each of the generating dams; this means that, generally, good annual snowpack (spring runoff) and rainfall increase the availability to generate power, serve customer loads and market any excess energy, while dry years with lower snowpack and rainfall mean less hydropower. Adding to the complexity, the nature of a federal multipurpose hydropower system means operations go beyond generating electricity to include other system uses such as: flood control and navigation, supplying irrigation water, municipal and industrial water use, supporting environmental services, and recreational uses. In 2023, WAPA continues to prepare for varying generation availability across its footprint to support power customers by:

• Forecasting resources through monthly hydropower reports: In coordination with generating agencies, WAPA's hydropower summary reports provide a monthly analysis of hydrological conditions such as reservoir levels, resulting in generation forecasts. The reports provide detailed narrative information about the conditions in the river systems. The reports are available online at WAPA.gov.

- *Prepared to purchase power:* When hydropower generation is constrained due to variable hydrology or operational constraints, WAPA may purchase power from other suppliers to fulfill its contractual commitments to customers. WAPA recovers these expenses from customers through its rates or direct billing.
- Customer coordination: WAPA advises utilities to communicate early with their appropriate marketing contacts to ensure that protocols are understood and in place. If a utility projects a load/resource imbalance, it should first attempt to resolve the situation through normal marketing contacts.

Grid Operations

As reliance on electric power for daily activities continues to grow in the U.S., addressing system interruptions and responding to EEAs in real-time is important. In 2023, similar to last year, this summer is anticipated to bring higher energy use across the United States. WAPA uses the following strategies to support electrical system reliability:

- BA and sub-BA coordination: WAPA BA and sub-BA staff regularly communicate with other entities within the area. In addition, WAPA actively reviews its load forecasts and resource plans to identify shortcomings and possible need for additional imports or resources.
- Market participation: WAPA and its customers now participate in several markets –
 CAISO Western Energy Imbalance Market, SPP Integrated Marketplace, and Western
 Energy Imbalance Service market. Market participation enhances operational efficiencies
 and provides cost savings to customers, while assisting their market members'
 responsiveness and reliability during electrical system changes, including energy
 emergencies.

Adverse Weather Conditions and Wildfire Outlook

The National Interagency Fire Center's Predictive Services Program releases a monthly fire-potential seasonal outlook for the nation's wildlands, and its April prediction indicates that wildland fire potential through July 2023 is ranging between normal and below normal for WAPA's service territory. This is driven by above average snowpack and precipitation this spring across WAPA's service territory. In 2023, WAPA is taking the following steps to address conditions:

- Vegetation management internal committee: WAPA will create a vegetation management committee to have a more structured approach for monitoring wildfire risk, right-of-way encroachments, and public and employee safety risks. The committee will recommend WAPA-wide and region-specific actions to address safety and reliability issues across WAPA's transmission system.
- Proactive maintenance key to responsive stance: WAPA continuously monitors and
 maintains its transmission system's health through regular aerial and ground patrols,
 managing vegetation on rights of way around power lines and near substation perimeters,
 and safely storing combustible materials.

Modeling wildfire activity near energy infrastructure: When wildfire activity presents
danger or potential danger to WAPA's infrastructure, WAPA overlays system maps with
daily models of fire perimeters and satellite images of fire hot spots to pinpoint specific
risks to WAPA assets and effectively mitigate adverse impacts to the transmission
system.

WAPA Teams Remain Ready and Responsive

When emergencies arise, WAPA and its customers must be prepared to adjust in real-time. WAPA will consider multiple factors before responding to an emergency, including protecting human health and safety; maintaining system reliability; meeting project uses and preference customer obligations; and working within environmental protection regulations.

These and other factors outside of our control could limit WAPA's ability to support neighboring utilities in an emergency; thus, support is not guaranteed. Customer utilities are encouraged to prepare for dynamic conditions and follow normal day-ahead and real-time operational procedures to address any anticipated load/resource imbalances. If the local WAPA merchant determines it has surplus power to offer, the excess energy may be made available for purchase.

If you have any questions regarding this letter, please contact me at LeBeau@wapa.gov, or Tina Ko, Executive Vice President, and Chief Operating Officer, at TKo@wapa.gov.

Sincerely,

Tracey A. LeBeau Administrator and CEO

Western Area Power Administration, DOE